

## Project Planning Phase

### Project Planning Template (Product Backlog, Sprint Planning, Stories, Story points)

Date	24 October 2022
Team ID	PNT2022TMID21469
Project Name	Smart Waste Management System For Metropolitan Cities
Maximum Marks	8 Marks

#### Product Backlog, Sprint Schedule, and Estimation (4 Marks)

Use the below template to create product backlog and sprint schedule

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Sprint-1	Registration	USN-1	As a user, I can register for the application by entering my employee ID, email, password, and confirming my password.	1	High	Shyam, Ajay Rajan
Sprint-1	Confirmation	USN-2	As a user, I will receive confirmation email once I have registered for the application	1	Medium	Shyam
Sprint-1	Login	USN-3	As a user, I can log into the application by entering email & password	2	High	Shyam
Sprint-1	Dashboard	USN-4	As a user, I can access all resources in the dashboard.	2	Medium	Tamilselvan
Sprint-1	Monitoring	USN-5	As a user, I can monitor the status of the smart bins.	1	High	Tamilselvan
Sprint-2	Cloud configure	USN-6	Create and configure the IBM Cloud services which are being used in this project.	2	High	Sajeev Krishna
Sprint-2		USN-7	Connect the IoT device to the IBM cloud, create a device in the IBM Watson IoT platform and get the device credentials.	3	Medium	Sajeev Krishna

<b>Sprint</b>	<b>Functional Requirement (Epic)</b>	<b>User Story Number</b>	<b>User Story / Task</b>	<b>Story Points</b>	<b>Priority</b>	<b>Team Members</b>
Sprint-2		USN-8	Develop a python script to publish random sensor data such as Loadcell, IR sensor and GSM/GPS to the IBM IoT platform	4	Medium	Shyam, Tamilselvan
Sprint-3	Creates and maintains	USN-9	As an admin, I can create and maintain all information about the bins.	2	Medium	Tamilselvan, Ajay
Sprint-3	Provide credentials	USN-10	As an admin, I can provide or revoke login credentials to the municipality employees	1	Low	Ajay Rajan, sajeev. Shyam
Sprint-4	Alerting	USN-11	As a user, I can alert the truck drivers to clear trash by sending the location of bin as SMS.	3	High	Ajay Rajan. Tamilselvan
Sprint-4	Add/Remove/Update smart bins in a locality	USN-12	As an admin, I can add, remove or update any bins in that locality into the system.	2	Medium	Shyam, Sajeev

#### **Project Tracker, Velocity & Burndown Chart: (4 Marks)**

<b>Sprint</b>	<b>Total Story Points</b>	<b>Duration</b>	<b>Sprint Start Date</b>	<b>Sprint End Date (Planned)</b>	<b>Story Points Completed (as on Planned End Date)</b>	<b>Sprint Release Date (Actual)</b>
Sprint-1	20	6 Days	24 Oct 2022	29 Oct 2022	20	29 Oct 2022
Sprint-2	20	6 Days	31 Oct 2022	05 Nov 2022	20	05 Nov 2022
Sprint-3	20	6 Days	07 Nov 2022	12 Nov 2022	20	12 Nov 2022
Sprint-4	20	6 Days	14 Nov 2022	19 Nov 2022	20	19 Nov 2022

**Velocity:**

Imagine we have a 10-day sprint duration, and the velocity of the team is 20 (points per sprint). Let's calculate the team's average velocity (AV) per iteration unit (story points per day)

$$AV = \frac{\textit{sprint duration}}{\textit{velocity}} = \frac{20}{10} = 2$$